

What Is Claimed Is:

1. A measurement system comprising a setting apparatus which causes network address settings to be made in measurement instruments through a network, wherein said measurement instruments comprise:

a sending/receiving means which communicates with an external apparatus or said setting means through said network;

a judgment means which judges whether this sending/receiving means is communicating through a connection-oriented connection; and

a setting means which performs network address settings based on the judgment results of said judgment means.

2. The measurement system of claim 1, characterized in that the TCP/IP protocol is used in communication in said network.

3. The measurement system of claim 1 or 2, characterized in that said connection-oriented connection is TCP.

4. The measurement system of any of claims 1 through 3, characterized in that said setting apparatus causes network address settings to be made by communication with said measurement instruments through a connectionless-oriented connection.

5. The measurement system of claim 4, characterized in that said connectionless-oriented connection is UDP.

6. The measurement system of any of claims 1 through 5, characterized in that said external apparatus is a computer which causes said measurement instruments to perform measurements and collects measured measurement data.

7. The measurement system of any of claims 1 through 6, characterized in that said measurement instruments comprise a display means which indicates the reception of network address setting requests from said setting apparatus.

8. The measurement system of any of claims 1 through 7, wherein said setting apparatus comprises:

an equipment information storage means which stores equipment information on said measurement instruments; and

a collection means which collects equipment information from said measurement instruments and stores it in said equipment information storage means.

9. The measurement system of claim 8, characterized in that said equipment information is at least the physical addresses of said measurement instruments or equipment numbers assigned in advance to each of said measurement instruments.

10. The measurement system of any of claims 1 through 9, characterized in that said setting apparatus comprises an address storage means which stores network addresses; and said sending/receiving means reads said network addresses and equipment information from both said address storage means and said equipment information storage means, and outputs said network addresses and said equipment information to said network.

11. A measurement method using a setting apparatus which causes network address settings to be made in measurement instruments through a network, comprising the steps of:

judging whether a sending/receiving means is communicating through a connection-oriented connection with the external apparatus or said setting means through said network; and

setting network addresses based on the judgment results.

12. A measurement system comprising measurement instruments which perform measurements in accordance with operation commands sent from a control apparatus through a network, wherein said control apparatus comprises:

a user control unit, into which said operation commands and passwords are entered;

a password generation unit which generates a password when an operation command is entered in this user control unit; and

a judgment unit which sends said operation command to said measurement instrument when said password entered in said user control unit matches said password from said password generation unit;

wherein said measurement instruments comprise a display unit, which inputs said password from said password generation unit, and displays said entered password as said password entered in said user control unit.

13. The measurement system of claim 12, characterized in that said judgment unit performs judgment within the password validity period of said password generation unit.

14. The measurement system of claim 13, characterized in that said display unit displays said password from said password generation unit for said validity period at the longest.

15. The measurement system of any of claims 12 through 14, characterized in that said password generation unit generates a password for each operation command from said user control unit.

16. The measurement system of any of claims 12 through 15, characterized in that said control apparatus comprises a conversion unit which converts at least said password entered in said user control unit or said password from said password generation unit according to prescribed rules and outputs it to said judgment unit.

17. The measurement system of claim 16, characterized in that said conversion unit performs conversion according to the type of operation command entered in said user control unit.

18. The measurement system of any of claims 12 through 17, characterized in that said control apparatus comprises a timing adjustment unit which adjusts the timing for sending, to said measurement instrument, said password generated by said password generation unit.

19. The measurement system of any of claims 12 through 18, characterized in that said judgment unit includes a history storage unit which stores the history of transmitted commands sent from said measurement instruments, wherein said password generation unit generates passwords based on said history stored in said history storage unit.

20. The measurement system of any of claims 12 through 19, characterized in that while an operation command from said control apparatus is being executed, said display unit will not display passwords from said control apparatus or other control apparatuses.

21. A measurement method in which measurement instruments perform measurements in accordance with operation commands sent from a control apparatus through a network, comprising the steps of:

entering an operation command in said control apparatus;
generating a password when said operation command is entered;

displaying said generated password on the display unit of said measurement instrument;

entering said password in said control apparatus; and

sending said operation command to said measurement instrument when said entered password matches said generated password.